

Teacher Candidate: Kasandra Stoudt Date: 06-06-2017

Cooperating Teacher: _____ Coop. Initials: _____

Group Size: 24 Allotted Time: 45min Grade Level: First Grade

Subject or Topic: Evaporation Section: _____

Standard: 4.2.K.A Identify the components of the water cycle.

I. Performance Objectives (Learning Outcomes):

- A. The students will identify the components of the water cycle by listening to the story "The Little Rain Drop" by Joanna Gray.
- B. The students will investigate the properties of evaporation by observing the process during an inquiry.
- C. The students will analyze the difference between evaporation and transpiration by discussing the processes and plant cell respiration.

II. Instructional Materials

A. Inquiry

1. small dishes or jar lids (2 per group)
2. tablespoons (1 per group)
3. water
4. light source (sun or lamp/light) (1 per group)
5. plastic wrap and or lids to cover dishes

B. Lesson

1. "The Little Rain Drop" by Joanna Gray
2. Water Cycle Diagram
3. Evaporation diagram additions
4. Transpiration diagram additions
5. Evaporation/ Transpiration coloring diagram
6. Diagram of a plant

III. Subject Matter/Content (prerequisite skills, key vocabulary, big idea, outline of additional content)

A. Prerequisite skills

1. Know that heat causes ice to melt and increases evaporation
2. Know that when water evaporates it does not vanish, but changes into a water vapor (gas) from a liquid.

B. Key Vocabulary

1. Transpiration: water vapor being released from plants due to the energy from the sun.
2. Water Vapor: The form that water is in when it evaporates.

C. Big Idea: Process of Evaporation and how it differs to Transpiration.

D. Content

1. Difference between Evaporation/Transpiration
2. Definition of the two
3. How they affect the environment

IV. Implementation

A. Introduction: Interactive Read Aloud with the book “The Little Rain Drop” by Joanna Gray. Discuss the book with students. Send them back to tables for lesson.

B. Development

1. Review from the day before and the different parts of the Water Cycle. Bring up Water Cycle chart, have students tell what the first part of the cycle is.
2. Have them talk about what they think Evaporation would look like. Add the depiction to the chart. (This will be done at every lesson.)
3. Start discussing what evaporation is with the students. Break down the word, and ask the students, based on the book, what they think the word means. Give them the definition and have them discuss what parts of the book represented evaporation.
4. Explain how to fill out the the recording sheet for the inquiry.
5. Start introducing the inquiry for the day. Explain the directions, and start handing out the supplies.
6. Start discussion using these questions before beginning the inquiry.
 1. Where does the water go after it forms puddles on the pavement?

2. Where does the water go from the clothes you put in the dryer?
 3. Ask students to predict what will happen to the water if it is left out overnight in an uncovered dish.
 4. Ask students what will happen if the dishes were covered.
 7. Have students perform the inquiry.
 8. Have another discussion with them after using these questions:
 1. Have students, on a sheet of paper answer these questions with a partner.
 2. Which dish evaporated faster?
 3. Where did the water go?
 4. How did the water evaporate?
 9. Discuss the experiment and what other things that could change it. Have students draw a diagram on the recording sheet of what they witnessed of the process of evaporation.
 10. Discuss with students about the process of Transpiration, and show them a diagram of a plant. Break down the word, and ask the students to infer from what they now know about Evaporation to think about what Transpiration could be.
 11. Have students talk with partners or table groups about what they think the difference is between the two. Show them the Venn Diagram and teach them how to fill it out. Fill it out together using the doc cam or one drawn on the board, about the differences between Evaporation and Transpiration.
 12. Have students fill out Ticket out the door and hand it in.
- C. Closure: Bring students back to the reading area. Review what was done that day, introduce book that will be read the next day.
- D. Accommodations/Differentiation
1. IEP Student: Benjamin is six years old and lives with a hearing impairment, he has a cochlear implant, but still struggles with singling out distinct voices during full class discussions. Benjamin does use sign language, and has an underdeveloped ability to read

lips (He can pick up some easy words but must be watching very closely).

2. Accommodations: Benjamin will have preferential seating at the tables so that he will be able to hear the video. The teacher has a mic, but will also put the directions for longer projects up on the board so that he has something to refer to. When there is group discussion, the teacher will repeat the information that other students comment on so that Benjamin can be fully included.
3. Differentiation: With the variety of activities ranging from kinesthetic to verbal linguistic, there is great diversity.

E. Assessment/Evaluation Plan

1. Formative

1. Inquiry
2. Ticket out the door
3. Transpiration Diagram
4. Evaporation Diagram

2. Evidence

1. Inquiry: Students will be assessed on their participation in the activity and their depiction of the evaporation process.
2. Ticket out the door: Students will be assessed on their ability to tell the difference between the two different processes.
3. Transpiration Diagram: Students will be assessed on their labeling of the diagram.
4. Venn Diagram: Students will be assessed on their labeling of the differences and similarities between Transpiration and Evaporation.

3. Assessment Scale

1. Students will be observed and monitored on a checklist for understanding and completion.
2. Inquiry: Mastery: 3 (having all pictures and aspects labeled), Proficiency: 2 (having missed only 1 picture or aspect), or Below Basic: 1 (Having 2 or more pictures/aspects mislabeled.)

3. Transpiration Diagram: Mastery: 3(having all aspects properly labeled), Proficiency: 2(having missed only 1 mislabeled), or Below Basic: 1 (Having 2 or more mislabeled.)
4. Venn Diagram: Mastery: 3(having all aspects properly labeled), Proficiency: 2(having missed only 1 mislabeled), or Below Basic: 1 (Having 2 or more mislabeled.)
5. Proficiency:3-4 Basic: 1-3 Below Basic: 0-1
6. Ticket out the door will be handed in for a grade of either Mastery: 3(having all aspects properly labeled), Proficiency: 2(having missed only 1 mislabeled), or Below Basic: 1 (Having 2 or more mislabeled.)

4. Summative: Final summative test at the end of the unit.

V. Reflective Response

- A. Report of Student Performance in Terms of Stated Objectives (Reflection on student performance written after lesson is taught, includes remediation for students who fail to meet acceptable level of achievement)
 1. Remediation Plan
- B. Personal Reflection (Questions written before lesson is taught. Reflective answers to question recorded after lesson is taught)
 1. Were the students engaged and participating throughout the lesson? How can I make the lesson more engaging to all of the students?
 2. Was my lesson effective in teaching the content? How can I make it more effective?
 3. Was my teaching effective? How could I have taught more effectively?

VI. Resources (in APA format)

- A. http://www-k12.atmos.washington.edu/k12/pilot/water_cycle/teacherpage.html
- B. <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&sqi=2&ved=0ahUKEwiO2cDnn-rPAhUBMz4KHf2aB2oQFggiMAE&url=http%3A%2F%2Fwww.stem4teachers.org%2Fwp-content%2Fuploads%2F2014>

[%2F02%2FEvaporation_for_K2_final.pdf&usg=AFQjCNHPiZVz6Zn-EVLsYOfvbLyCXJ35lg&sig2=h4BqySP-vMorbv3O8c9E_A&bvm=bv.136499718.d.cWw](#)

- C. Gray, J., & Kolanovic, D. (n.d.). *The Little Rain Drop*. New York: Sandy Creek.